

## In the Claims:

Please cancel claim 5 without prejudice, add new claims 37 to 49, and amend claims 1 to 4, 6 to 8, 10, and 13 to 35. Group I cosmetic compositions claims 1 to 23 are *provisionally* elected for further prosecution with traversal. In addition the origin of the enzyme is *provisionally* elected to be *Cucurbita* species, the enzyme stabilizing substance is *provisionally* elected to be a buffer, the solid support is *provisionally* elected to be polyethylene glycol and the at least one cosmetic ingredient is *provisionally* elected to be a wetting agent or emulsifier.

1. (currently amended) A cosmetic ~~Cosmetic~~ composition comprising
  - (a) at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts ~~derivative and an ascorbic acid salt~~,
  - (b) an enzyme that catalyzes enzymatic ~~the enzymatical~~ oxidation of said at least one compound ~~of ascorbic acid, ascorbic acid derivative or ascorbic acid salt~~ and
  - (c) at least one cosmetic ingredient;in which said enzyme is an oxygen-utilizing ascorbate oxidase.
2. (currently amended) The composition as defined in claim 1, wherein the pH is from 1.5 to 10.
3. (currently amended) The composition as defined in claim 1, wherein the pH is

from 3.5 to 8.

4. (currently amended) The composition as defined in claim 1, wherein the composition is a hair treatment composition.

Claim 5. (canceled)

6. (currently amended) The composition as defined in claim [5]1, wherein the enzyme belongs to the Enzyme Commission class [1.10.3.3].

7. (currently amended) The composition as defined in claim ~~[[5]]~~1, wherein the enzyme is of plant origin.

8. (currently amended) The composition as defined in claim 7, wherein the enzyme is derived from *Arabidopsis*, *Brassica*, *Cucumis*, *Cucurbita*, *Myrothecium*, *Nicotiana*, *Oryza*, *Sinapis*, or *Triticum* species.

9. (original) The composition as defined in claim 8, wherein the enzyme is derived from *Cucurbita pepo medullosa* (zucchini).

10. (original) The composition as defined in claim 1, wherein the enzyme is a cloned enzyme expressed in cultured cells or in an organism other than that from which ~~[[the]]~~ a gene for the enzyme is derived.

11. (original) The composition as defined in claim 10, wherein the enzyme is expressed in bacterial or yeast cultures.

12. (original) The composition as defined in claim 10, wherein the enzyme is derived from bacterial or fungal species.

13. (currently amended) The composition as defined in claim ~~[[5]]~~ 1, wherein the enzyme is stabilized by ~~[[a]]~~ an enzyme stabilizing substance selected from the group consisting of buffers, glycerol, polyhydroxy compounds, metal chelating agents, thiols, polyethylene glycol and nonreactive proteins.

14. (currently amended) The composition as defined in claim ~~[[5]]~~ 1, wherein the enzyme is stabilized by immobilization ~~immobilisation~~.

15. (currently amended) The composition as defined in claim 14, wherein the immobilization ~~immobilisation~~ is made by covalently attaching the enzyme ~~enzymes~~ to a solid support selected from the group consisting of microparticles of surface-modified silica, alumina, glass, oxirane-modified polymethacrylate, carboxyalkylcellulose, aminoalkylsilica, aminoalkyl glass, aminoalkyl cellulose, carboxyalkyl cellulose, dialkylamino-substituted cellulose, polyethylene glycol (~~PEG~~), polyacrylic acid, polyvinyl alcohol, polyethyleneimine, dextran, gelatin and uricase.

16. (currently amended) The composition as defined in claim 1, wherein said enzyme is contained in a concentration of from 1 to 10000 ppm~~[[,]]~~~~whereas this is the concentration of ascorbate oxidase in the ready-to-use composition~~ immediately after mixing of all components of ~~[[this]]~~ a ready-to-use composition, said ready-to-use composition including oxygen as well as said at least one compound, said enzyme, and said said at least one cosmetic ingredient.

17. (currently amended) The composition as defined in claim 1, wherein said enzyme is contained in a concentration of from 10 to 1000 ppm~~[[,]]~~~~whereas this is the concentration of ascorbate oxidase in the ready-to-use composition~~ immediately after mixing of all components of ~~[[this]]~~ a ready-to-use composition, said ready-to-use composition including oxygen as well as said at least one compound, said enzyme, and said said at least one cosmetic ingredient.

18. (currently amended) The composition defined in claim 1, wherein said at least one compound ~~the ascorbic acid, ascorbic acid derivative and/or ascorbic acid salt~~ is present as an anhydrous powder, a granulate, a coated material, a tablet, or is micro-encapsulated.

19. (currently amended) The composition as defined in claim 1, wherein the at least one cosmetic ingredient is selected from the group consisting of thickening agents, ~~such as bentonite, kaolin, fatty acids, starch, guar gum, high molecular~~

~~weight fatty alcohols, polyacrylic acid and its derivatives, cellulose derivatives, alginates, Vaseline, paraffin oils[[,]] wetting agents, [[or ]]emulsifiers, from the classes of anionic, cationic, amphoteric or nonionic surface active substances, such as fatty alcohol sulfates, fatty alcohol ether sulfates, alkylsulfonates, alkylbenzenesulfates, quaternary ammonium salts, alkylbetaines, ethoxylated alkylphenols, fatty acid alkanolamides or ethoxylated fatty esters, furthermore opacifiers, such as polyethylene glycol esters[[,]] alcohols, such as ethanol, propanol, isopropanol, polyols, such as ethylene glycol, 1,2- or 1,3-dihydroxypropane, 1,2-, 1,3- or 1,4-dihydroxybutane, 1,2-, 1,3-, 1,4- or 1,5-dihydroxypentane and glycerin, sugars, such as D-glucose[[,]] solubilizers, stabilizers, buffering substances, perfume oils, dyes, as well as hair conditioning and hair care components, such as cationic polymers, silicone polymers, cationic silicone polymers[[,]] UV-filters, betaine, lanolin, lanolin derivatives, protein derivatives, [[and]] protein hydrolysates, amino acids, cholesterol, pantothenic acid, vitamins, provitamins and plant extracts.~~

20. (currently amended) The composition as defined in claim 1, wherein the at least one compound ~~ascorbic acid, ascorbic acid derivative and/or ascorbic acid salt~~ is present in a concentration of from about 0.1 to about 20 % by weight in a [[the]] ready-for-use composition, said ready-for-use composition including oxygen as well as said at least one compound, said enzyme, and said said at least one cosmetic ingredient.

21. (currently amended) The composition as defined in claim 20, wherein said  
~~the ascorbic acid, ascorbic acid derivative and/or ascorbic acid salt is present in~~  
a concentration is ~~[[of]]~~ from about 0.5 to about 10% by weight in the ready-for-  
use composition.

22. (currently amended) The composition as defined in claim 1, consisting of  
~~whereby said cosmetic composition is a hair fixing composition for permanently~~  
shaping hair.

23. (currently amended) The composition as defined in claim 1, consisting of  
~~whereby said composition is an aqueous solution.~~

24. (currently amended) A method for preparing a ready-to-use cosmetic  
composition for ~~[[the]]~~ oxidative treatment of skin or hair, said method comprising  
the steps of:

(i) providing a component (A) comprising at least one compound ~~selected~~  
~~from the group of ascorbic acid, ascorbic acid derivative and ascorbic acid salt as~~  
~~well as at least one cosmetic ingredient~~ and at least one cosmetic ingredient,  
said at least one compound being selected from the group consisting of ascorbic  
acid, ascorbic acid derivatives and ascorbic acid salts;

(ii) providing a component (B) comprising an enzyme ~~that catalyzes the~~  
~~enzymatical oxidation of said of ascorbic acid, ascorbic acid derivative and~~  
~~ascorbic acid salt,~~ said enzyme catalyzing enzymatic oxidation of said at least

one compound and consisting of an oxygen-utilizing ascorbate oxidase;

(iii) providing a component (C) comprising oxygen;

(iv) ~~mixing components~~ the component (A) and the component (B) for from about 1 minute to about 20 minutes before application to form a mixture [[.]]; and

(v) mixing component (C) intensely with the mixture of ~~components~~ the component (A) and the component (B).

25. (currently amended) A method for preparing a ready-to-use cosmetic composition for the oxidative treatment of skin or hair, said method comprising the steps of:

(i) providing a component (A'), said component (A') comprising in dry solid form:

at least one compound selected from the group ~~of ascorbic acid, ascorbic acid derivative and ascorbic acid salt~~ consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts;

~~at least an enzyme that catalyzes~~ enzymatic oxidation of said at least one compound and that consists of an oxygen-utilizing ascorbate oxidase ~~the enzymatical oxidation of said of ascorbic acid, ascorbic acid derivative and ascorbic acid salt;~~ and

at least one cosmetic ingredient;

(ii) providing a component (B'), said component (B') comprising an aqueous or aqueous-alcoholic composition;

(iii) providing a component (C') comprising oxygen;



(iv) ~~mixing components~~ the component (A') and the component (B') for  
~~from about 1 minute to about 20 minutes before application to form a mixture~~ [[.]];  
and

(v) allowing ~~leaving component (C') to come into contact intensely with the~~  
~~mixture of the component (A') and the component (B') components (A) and (B).~~

26. (currently amended) The method as defined in claim 24 or 25, wherein the oxygen is present in the form of air, purified oxygen gas, an oxygen containing mixture or any other oxygen gas releasing compound.

27. (currently amended) The method as defined in claim 24 or 25, wherein said allowing of said component (C) or said component (C') to come into contact intensely with said mixture ~~step (v)~~ is carried out in a pressurized container.

28. (currently amended) The method as defined in claim 24 or 25, wherein said allowing of said component (C) or said component (C') to come into contact intensely with said mixture ~~step (v)~~ is carried out in presence of a solution of one or more anionic, cationic, zwitterionic or nonionic surfactants appropriate to provide an oxygenated foam.

29. (currently amended) The method as defined in claim 24 or 25, wherein the oxygen in said allowing of said component (C) or said component (C') to come into contact intensely with said mixture ~~step (v)~~ is chemically or physically bound



in an oxygen containing compound.

30. (currently amended) A method for the oxidative treatment of keratin, said method comprising the steps of:

~~a) providing said cosmetic composition of claim 1~~

(a) providing a cosmetic composition comprising at least one cosmetic ingredient; an enzyme that catalyzes enzymatic oxidation of said at least one compound; and at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts, wherein said enzyme consisting of an oxygen-utilizing ascorbate oxidase;

(b) applying said cosmetic composition to the keratin,

(c) allowing said cosmetic composition to act on the keratin for a sufficient time, and then

(d) rinsing the keratin.

31. (currently amended) The [[A]] method as defined in claim 30, in which  
~~whereby the keratin is hair.~~

32. (currently amended) The [[A]] method as defined in claim 30, in which  
~~whereby the oxidative treatment is a oxidative post treatment of reduced hair in a~~  
[[the]] process of permanent shaping of the hair.

33. (currently amended) The [[A]] method as defined in claim 30, in which

~~whereby~~ the sufficient time in step (c) is from about 5 minutes to about 25 minutes.

34. (currently amended) A method for permanently shaping hair, said method comprising the steps of:

- a) bringing the hair into a desired shape;
  - b) applying a keratin-reducing composition to the hair and allowing the keratin-reducing composition to act on the hair for a period of action sufficient for the permanent shaping of the hair;
  - c) rinsing the hair after the applying and the allowing of step b);
  - d) providing an oxidative hair fixing composition; ~~as defined in claim 22[[,]]~~
  - e) after the rinsing of step c), applying said oxidative hair fixing composition to the hair and allowing said oxidative hair fixing composition to act on the hair for a time sufficient for fixing of the hair in the desired shape; and
  - f) after the applying and the allowing of step e), rinsing the hair again;
- in which said oxidative hair fixing composition comprises at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts; an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound; and at least one cosmetic ingredient.

35. (currently amended) A method for permanently waving hair, said method comprising the steps of:

- a) bringing the hair into a desired shape;
- b) applying a keratin-reducing composition to the hair and allowing the keratin-reducing composition to act on the hair for a period of action sufficient for the permanent waving of the hair;
- c) rinsing the hair after step b);
- d) providing an oxidative hair fixing composition; ~~as defined in claim 22[[,]]~~
- e) after the rinsing of step c), applying said oxidative composition as a pre-fixing composition to the hair and allowing said oxidative pre-fixing composition to act on the hair for a time sufficient for pre-fixing the hair; and
- f) after the pre-fixing of the hair of step e), treating of the hair with an oxidative post-fixing composition for post-fixing the hair, said oxidative post-fixing composition containing from 0.1 to 1 percent by weight of hydrogen peroxide or from 1 to 5 percent by weight of bromate as oxidizing agent;

in which said oxidative hair fixing composition comprises at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts; an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound; and at least one cosmetic ingredient.

36. (original) The method as defined in claim 35, wherein said oxidative pre-fixing composition is a solution and has a pH of 3.5 to 9.

37. (new) The cosmetic composition as defined in claim 1, wherein said at least

one cosmetic ingredient is at least one wetting agent or emulsifier selected from the group consisting of cationic surface-active substances, anionic surface-active substances, amphoteric surface-active substances and nonionic surface-active substances.

38. (new) The cosmetic composition as defined in claim 37, wherein said at least one wetting agent or emulsifier is selected from the group consisting of fatty alcohol sulfates, fatty alcohol ether sulfates, alkylsulfonates, alkylbenzenesulfates, quaternary ammonium salts, alkylbetaines, ethoxylated alkylphenols, fatty acid alkanolamides and ethoxylated fatty esters.

39. (new) The cosmetic composition as defined in claim 19, wherein said thickening agents comprise bentonite, kaolin, fatty acids, starch, guar gum, fatty alcohols, polyacrylic acid, polyacrylic acid derivatives, cellulose derivatives, alginates, petrolatum and paraffin oils.

40. (new) The cosmetic composition as defined in claim 19, wherein said alcohols comprise ethanol, propanol, isopropanol, ethylene glycol, 1,2-dihydroxypropane, 1,3-dihydroxypropane, 1,2-dihydroxybutane, 1,3-dihydroxybutane, 1,4-dihydroxybutane, 1,2-dihydroxypentane, 1,3-dihydroxypentane, 1,4-dihydroxypentane, 1,5-dihydroxypentane and glycerol.

41. (new) The cosmetic composition as defined in claim 19, wherein said hair care components comprise cationic polymers, silicone polymers and cationic silicone polymers.
42. (new) The cosmetic composition as defined in claim 19, wherein said opacifiers comprise polyethylene glycol esters.
43. (new) The cosmetic composition as defined in claim 13, wherein said enzyme stabilizing substance is one of said buffers.
44. (new) A cosmetic composition comprising
- (a) at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts,
  - (b) an enzyme that catalyzes enzymatic oxidation of said at least one compound and that is stabilized by at least one enzyme stabilizing substance,
  - (c) a solid support for said enzyme, said enzyme being immobilized by covalent bonding of said enzyme to said solid support, and
  - (d) at least one cosmetic ingredient selected from the group consisting of thickening agents, wetting agents, emulsifiers, opacifiers, sugars, solubilizers, stabilizers, buffering substances, perfume oils, dyes, hair conditioning components, hair care components, UV-filters, betaine, lanolin, lanolin derivatives, protein derivatives, protein hydrolysates, amino acids, cholesterol,

pantothenic acid, vitamins, provitamins and plant extracts;

in which said at least one enzyme stabilizing substance is selected from the group consisting of buffers, glycerol, polyhydroxy compounds, metal chelating agents, thiols, polyethylene glycol and nonreactive proteins;

in which said enzyme is an oxygen-utilizing ascorbate oxidase belonging to enzyme commission class [1.10.3.3] and is derived from *Arabidopsis*, *Brassica*, *Cucumis*, *Cucurbita*, *Myrothecium*, *Nicotiana*, *Oryza*, *Sinapis*, or *Titicum* species; and

in which said solid support is selected from the group consisting of microparticles of surface-modified silica, alumina, glass, oxirane-modified polymethacrylate, carboxyalkylcellulose, aminoalkylsilica, aminoalkyl glass, aminoalkyl cellulose, carboxyalkyl cellulose, dialkylamino-substituted cellulose, polyethylene glycol, polyacrylic acid, polyvinyl alcohol, polyethyleneimine, dextran, gelatin and uricase.

45. (new) The cosmetic composition as defined in claim 44, wherein said enzyme is derived from said *Cucurbita* species.

46. (new) The cosmetic composition as defined in claim 44, wherein said at least one enzyme stabilizing substance is one of said buffers.

47. (new) The cosmetic composition as defined in claim 44, wherein said solid support is said polyethylene glycol.

48. (new) The cosmetic composition as defined in claim 44, wherein said at least one cosmetic ingredient is at least one wetting agent or emulsifier selected from the group consisting of cationic surface-active substances, anionic surface-active substances, amphoteric surface-active substances and nonionic surface-active substances.

49. (new) A ready-to-use cosmetic composition comprising

- (a) at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts;
- (b) an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound;
- (c) oxygen; and
- (d) at least one cosmetic ingredient.